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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/671,600

09/29/2003

Toshihiko Fushimi

1095.1285

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7590

07/12/2006

STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

TRAN, TUYETLIEN T

ART UNIT

PAPER NUMBER

2179

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/671,600

Applicant(s)

FUSHIMI ET AL.

Examiner

Tuyetlien T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/25/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09/25/2003</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

1. The use of the trademark "MICROSOFT EXCEL" has been noted in this application, see page 1 of the disclosure. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 and 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claim 1, a "program" is being recited; however, as disclosed by the specification, a program is taught to be software, per se.

As to claim 13, sections are being recited; however, as disclosed by the specification, sections are taught to be software modules, per se.

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Claims 2-11 are rejected as incorporating the deficiencies of a claim upon which it depends.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly, Julia (book titled "Using Microsoft Excel 2000", ISBN: 0789718626; hereinafter Kelly) in view of Eick et al. (Patent No. 5,596,703, hereinafter Eick).

As to claim 1, Kelly teaches:

A program for displaying a radar chart on the screen of a display unit (EXCEL 2000 - chart wizard, see chapter 20 page 387; note that this chart wizard also includes radar chart see figure 20.9, item 3 on page 393), the program causing a computer to perform the processes of:

judging a degree of association (see selected cells A1 to C7, see figure 20.1, item 2, on pp. 387) between each of a plurality of axial labels (Jan, Feb from cells B2 to C2, see figure 20.1, item 2, pp. 387) and at least one arranged keyword (Marcia to Jamie from cells A3 to A7, see figure 20.1, item 2, pp. 387) on the basis of data indicative of the relationship between each of the plurality of axial labels and the arranged keyword (numeric data from cells B3 to C7, see figure 20.1, item 2, pp. 387);

assigning the plurality of axial labels (labels 25-50) to a plurality of axes (axes of a polygon) on a radar chart (figure 20.9, item 3) and setting a reference point (axes of the polygon has a value of 60 from the origin) for the assigned axial label (labels 25-50) on each of the plurality of axes (see figure 20.9, item 3, pp. 393);

setting a display position for the arranged keyword at a location (note that EXCEL allows setting a display position for the arranged keyword anywhere on the radar chart, see section "Add Your Own Labels", pp. 422) ; and

displaying an image indicative of the arranged keyword at the display position set on the radar chart (note in section "Add Your Own Labels", pp. 422. EXCEL further allows a free-floating label indicative of the arranged keyword to be added on the radar chart anywhere on the chart).

Kelly does not teach that the higher the degree of association is, the nearer to a reference point the display position would be.

Eick teaches setting a display position for the arranged keyword (e.g. one of the node 305, see figure 3) at a location nearer to a reference point (e.g. another node 305 is located closer to one of the node; see figure 3) for an axial label the degree of association of which with the arranged keyword is relatively high than to a reference point for an axial label the degree of association of which with the arranged keyword is relatively low (note that the higher the value is, the closer the nodes will be to each other, see column 4, lines 41-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the step of setting a display position as taught by

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Eick to the program as taught by Kelly to solve the problem of clutter and to increase the clarity of the information displayed in the graph (see column 2, lines 33-42).

As to claim 12, this claim differs from claim 1 only in that claim 12 a method claim whereas, claim 1 is a program claim. Thus claim 12 is analyzed as previously discussed with respect to claim 1 above.

As to claim 13, this claim differs from claim 1 only in that claim 13 recites a unit, this unit comprising sections that performs similar functions as disclosed in claim 1. Thus claim 13 is analyzed as previously discussed with respect to claim 1 above.

As to claim 14, this claim differs from claim 1 only in that claim 14 being claimed in combination with a physical article whereas, claim 1 is a program claim, per se. Thus claim 14 is analyzed as previously discussed with respect to claim 1 above.

As to claim 2, Kelly teaches wherein a line segment (lines drawn by drawing toolbar, see table 30.1, line 7, pp 565) which connects the image indicative of the arranged keyword (labels Marcia to Jamie, see figure 20.1, item 2, pp. 387) and a reference point for each of the plurality of axial labels (the axes point of the polygon, see figure 20.9, item 3, pp. 393) is displayed in a thickness corresponding to a degree of association (numeric data from cells B3 to C7, see figure 20.1, item 2, pp. 387) between the arranged keyword and each of the plurality of axial labels (note drawing toolbar in MICROSOFT EXCEL can be used to draw image labels and lines free-floating anywhere on the chart, see page 422, lines 6-12. Further note in page 565, table 30.1; line tool is utilized to draw line segment from one point to another and that line styles can be employed to change line thickness).

As to claim 3, Kelly teaches wherein if there are a plurality of arranged keywords, an image indicative of each of the plurality of arranged keywords (labels Marcia to Jamie, see figure 20.1, item 2, pp. 387) is displayed on one radar chart (note that MICROSOFT EXCEL allows plurality of image labels to be displayed free-floating anywhere on the radar chart, see page 422, lines 6-12).

As to claim 6, Kelly further teaches causing a computer to perform the process of remaking a radar chart (note that chart toolbar allows remaking some changes to a radar chart, see figure 20.10, pp. 394) on which the axial labels (Jan, Feb from cells B2 to C2, see figure 20.1, item 2, pp. 387) have been replaced (change orientation, see table 20.1, By Row and By Column, pp. 394) with the arranged keywords (Marcia to Jamie from cells A3 to A7, see figure 20.1, item 2, pp. 387) and on which the arranged keywords have been replaced (change orientation) with the axial labels (cells B2 to C2) by the use of original tabular data (see cells A2 to C7, figure 20.1, item 2, pp. 387) for the radar chart being displayed in response to operation input (by clicking either buttons 6 or 7 from the Chart toolbar, see figure 20.10, item 6 and 7, pp. 394) provided while the radar chart is being displayed (note that the Chart toolbar allows changes to be made to the chart quickly while being displayed, see Table 20.1 on page 394 where it says "By Row" or "By Column").

As to claim 11, Kelly further causing a computer to perform the process of generating data (data worksheet, note that the worksheet contains data block A2 to C7 associated with the chart next to it, see figure 20.3, pp 388) from which the contents of a displayed radar chart can be reproduced and outputting the generated data in response

to operation input (further note that the chart can be updated automatically to reflect the changed data made to data block, see pp 388, lines 5-7).

4. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly in view of Eick as applied to claim 1, above, further in view of Jou at el. (Pub. No. US 2003/0071814 A1, hereinafter Jou).

As to claim 4, Kelly and Eick teach the limitation of claim 1 as previously discussed with respect to claim 1 above.

Kelly and Eick do not teach that when an image label is selected, a radar chart will be remade to display only the selected image.

Jou teaches that further causing a computer to perform the process of remaking a radar chart on which only a selected image is to be displayed in response to operation input for selecting the image (selecting a radio label associated with the chart, see e.g., [0040]) provided while the radar chart on which the images indicative of the plurality of arranged keywords are shown is being displayed (note that by selecting data item radio label, a chart will be remade to show only the selected item, see e.g., [0040]. Further note that data item is defined as textual or numerical component of a chart, see e.g., [0022]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the radio label which allows selected image to be displayed as taught by Jou to the program of Kelly as modified by Eick to avoid the



cluster problem when graphs becoming too small and illegible (see e.g., [0024], lines 21-28).

As to claim 5, Kelly teaches wherein if a radar chart on which only the selected image is to be displayed is remade, a broken line indicative of the characteristics of an arranged keyword indicated by the selected image is displayed on the newly made radar chart (it is noted that the inner thicker line shown in figure 20.9, item 3, pp. 393 or Kelly also a broken line as the same way as applicant's disclosed device described in Fig. 19 and pp. 1, lines 22-23 of the specification).

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly in view of Eick as applied to claim 1, above, further in view of Misue at el. (Patent No. 5,764,239, hereinafter Misue).

As to claim 7, Kelly and Eick teach the limitation of claim 1 as previously discussed with respect to claim 1 above.

Kelly and Eich do not teach wherein a location where all the spring forces acting at the display position for the arranged keyword are balanced is set as a display position for the arranged keyword.

Misue teaches wherein a virtual spring force (force directive method, see column 3, lines 3-5) which changes according to distance is defined between a display position (a node, see column 3, lines 3-14) for the arranged keyword and a reference point (another node, see column 3, lines 3-14) for an axial label to which the arranged keyword has a relationship, further wherein a location where all the spring forces acting

at the display position for the arranged keyword are balanced is set as a display position for the arranged keyword (a stable state of all the spring forces is calculated to determine the position of the node, see column 3, lines 1-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the module of setting display position for the arranged keyword as taught by Misue to the program of Kelly as modified by Eick to draw or to display a graph corresponding to the stable state of the physical model (see column 3, lines 1-14).

As to claim 8, Eick teaches that wherein as the degree of association between the arranged keyword and the axial label increases, the spring force becomes stronger (note that as a size of the corresponding link increases, the spring between them becomes stronger, see column 12, lines 39-45). Therefore, combining Kelly, Misue, and Eick would meet the claimed limitation for the same reason as discussed in claim 1.

As to claim 9, Misue further teaches that wherein a virtual repellant force (repulsion acting between nodes, see column 3, lines 3-5) is defined between the display position (a node, see column 3, lines 3-14) for the arranged keyword and a reference point (another node, see column 3, lines 3-14) for an axial label to which the arranged keyword has no relationship (note that repulsion forces act between nodes that have no relationship with each other, see col. 6, lines 12-17), further wherein a location where all the spring and repellant forces acting at the position for the arranged keyword are balanced (stable state, see col 5, lines 36-40) is set as a display position for the arranged keyword (note that the stable state is calculated where all the spring

and repellent forces acting on a node are balanced, see column 3, lines 1-14). Thus, combining Kelly, Misue, and Eick would meet the claimed limitation for the same reason as discussed in claim 7.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly in view of Eick as applied to claim 1, above, further in view of Segawa (Pub. No. US 2002/0032037 A1, hereinafter Segawa).

As to claim 10, Kelly and Eick teach the limitation of claim 1 as previously discussed with respect to claim 1 above.

Kelly and Eich do not teach further judging a degree of association between each of axial labels and an arranged keyword based upon textual data.

Segawa teaches further causing a computer to perform the processes of: extracting keywords (keyword classification, see e.g., [0037], line 4) included in a plurality of pieces of text data (see e.g., [0037], line 3) and calculating the degree of association between the extracted keywords (statistical qualities, see e.g., [0037]); and judging a degree of association between each of axial labels and an arranged keyword by specifying the axial labels and the arranged keyword from among the extracted keywords (analyze statistical qualities, see e.g., [0037]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the step of judging a degree of association between each of axial labels and an arranged keyword based upon textual data of Segawa to the

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program of Kelly as modified by Eick to collect and analyze the user's opinion and impressions (see e.g., [0060]).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent No. 5,461,708 recites a spreadsheet system that includes an intelligent graphing module for automatically selecting a graph type based on a user's own data.

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyetlien T. Tran whose telephone number is 571-270-1033. The examiner can normally be reached on Mon-Friday: 7:30 - 5:00 (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh D. Nguyen can be reached on 571-272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*L.T*  
5/30/06

*Lien Tran*  
Examiner  
Art Unit 2179

  
**CHANH NGUYEN**  
**PRIMARY EXAMINER**